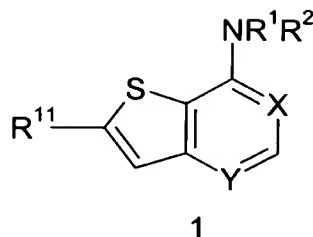


5 What is claimed:

1. A compound of the formula of formula 1



or a pharmaceutically acceptable salt, prodrug or hydrate thereof,

X is N, CH or C(CN);

Y is N, CH, CF, or N→O;

R¹ is H or C₁-C₆ alkyl;

R² is 5 to 13 membered heterocyclic, wherein said R² group is optionally substituted by 1 to 5 R⁵ substituents,

each R⁵ is independently selected from halo, cyano, trifluoromethoxy, trifluoromethyl, -C(O)R⁸, -NR⁶C(O)R⁷, -C(O)NR⁶R⁷, -NR⁶R⁷, -OR⁹, -SO₂NR⁶R⁷, -SO₂R⁶, -NR⁶SO₂R⁷, -NR⁶SO₂NR⁹R¹⁰, C₁-C₆ alkyl, C₂-C₆ alkenyl, C₂-C₆ alkynyl, -(CH₂)ₗO(CH₂)ₘNR⁶R⁷, -(CH₂)ₗO(CH₂)ₘOR⁹, -(CH₂)ₗOR⁹, -S(O)ₙ(C₁-C₆ alkyl), -(CH₂)ₗ(C₆-C₁₀ aryl), -(CH₂)ₗ(5 to 10 membered heterocyclic), -(CH₂)ₗO(CH₂)ₘ(5 to 10 membered heterocyclic), -C(O)(CH₂)ₗ(5 to 10 membered heterocyclic), -(CH₂)ₗNR⁷(CH₂)ₘNR⁶R⁷, -(CH₂)ₗNR⁷CH₂C(O)NR⁶R⁷, -(CH₂)ₗNR⁷(CH₂)ₘNR⁹C(O)R⁸, -(CH₂)ₗNR⁷(CH₂)ₘO(CH₂)ₙOR⁹, -(CH₂)ₗNR⁷(CH₂)ₘS(O)ₙ(C₁-C₆ alkyl), -(CH₂)ₗNR⁷(CH₂)ₘR⁶, -SO₂(CH₂)ₗ(C₆-C₁₀ aryl), and -SO₂(CH₂)ₗ(5 to 10 membered heterocyclic), wherein j is an integer from 0 to 2, t is an integer from 0 to 6, q is an integer from 2 to 6, the -(CH₂)ₘ- and -(CH₂)ₙ- moieties of the foregoing R⁵ groups optionally include a carbon-carbon double or triple bond where t is an integer from 2 to 6, and the alkyl, aryl and heterocyclic moieties of the foregoing R⁵ groups are optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, -C(O)R⁸, -NR⁶C(O)R⁷, -C(O)NR⁶R⁷, -(CH₂)ₗNR⁶R⁷, -SO₂R⁶, -SO₂NR⁶R⁷, C₁-C₆ alkyl, -(CH₂)ₗ(5 to 10 membered heterocyclic), -(CH₂)ₗO(CH₂)ₘOR⁹, and -(CH₂)ₗOR⁹, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6;

each R⁶ and R⁷ is independently selected from H, C₁-C₆ alkyl, -(CH₂)ₗ(C₆-C₁₀ aryl), -(CH₂)ₗ(5 to 10 membered heterocyclic), -(CH₂)ₗO(CH₂)ₘOR⁹, and -(CH₂)ₗOR⁹, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, and the alkyl, aryl and heterocyclic moieties of the foregoing R⁶ and R⁷ groups are optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, -C(O)R⁸, -NR⁹C(O)R¹⁰, -C(O)NR⁹R¹⁰, -NR⁹R¹⁰, C₁-C₆ alkyl, -(CH₂)ₗ(C₆-C₁₀ aryl), -(CH₂)ₗ(5 to 10 membered

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5 heterocyclic), $-(CH_2)_tO(CH_2)_qOR^9$, and $-(CH_2)_tOR^9$, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, with the proviso that where R^6 and R^7 are both attached to the same nitrogen, then R^6 and R^7 are not both bonded to the nitrogen directly through an oxygen;

each R^8 is independently selected from H, C_1 - C_{10} alkyl, $-(CH_2)_t(C_6$ - C_{10} aryl), and $-(CH_2)_t$ (5 to 10 membered heterocyclic), wherein t is an integer from 0 to 6;

10 each R^9 and R^{10} is independently selected from H and C_1 - C_6 alkyl;

R^{11} is $-C(O)NR^{12}R^{13}$, $-(CH_2)_tNR^{12}R^{13}$, $-NR^{12}C(=O)R^{13}$, $-SO_2R^{12}$, $-SO_2NR^{12}R^{13}$, $-NR^9SO_2R^{12}$, $-NR^9SO_2NR^{12}R^{13}$, $-C(=N-OR^{12})R^{13}$, $-C(=NR^{12})R^{13}$, $-NR^9C(=NR^{12})R^{13}$, $-C(=NR^{12})NR^9R^{13}$, $-NR^9C(=NR^{12})NR^9R^{13}$, $-C(O)R^{12}$ and $-CO_2R^{12}$ and wherein each R^{12} and R^{13}

15 is independently selected from H, C_1 - C_6 alkyl, $-(CH_2)_t(C_3$ - C_{10} cycloalkyl), $-(CH_2)_t(C_6$ - C_{10} aryl), $-(CH_2)_t$ (5 to 10 membered heterocyclic), $-(CH_2)_tO(CH_2)_qOR^9$, $-(CH_2)_tOR^9$, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, and the alkyl, aryl and heterocyclic moieties of the foregoing R^{12} and R^{13} groups are optionally substituted by 1 to 3 substituents independently selected from R^5 or R^{12} and R^{13} taken together with the nitrogen to which they are attached to form a C_5 - C_9 azabicyclic, aziridinyl, azetidiny, pyrrolidinyl, piperidinyl, piperazinyl, morpholinyl, thiomorpholinyl, isoquinolinyl, or dihydroisoquinolinyl ring, wherein said C_5 - C_9 azabicyclic, aziridinyl, azetidiny, pyrrolidinyl, piperidinyl, piperazinyl, morpholinyl, thiomorpholinyl, isoquinolinyl, or dihydroisoquinolinyl ring are optionally substituted by 1 to 5 R^5 substituents, with the proviso R^{12} and R^{13} are not both bonded to the nitrogen directly through an oxygen.

25 2. The compound of claim 1, wherein R^{11} is $-C(O)NR^{12}R^{13}$, $-SO_2R^{12}$, $-SO_2NR^{12}R^{13}$, $-C(=N-OR^{12})R^{13}$, and $-C(=NR^{12})R^{13}$ wherein each R^{12} and R^{13} is independently selected from H, C_1 - C_6 alkyl, $-(CH_2)_tOR^9$, wherein t is an integer from 0 to 6, and the alkyl moiety of the foregoing R^{12} and R^{13} groups is optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, $-C(O)R^8$, $-NR^9C(O)R^{10}$, $-C(O)NR^9R^{10}$, $-NR^9R^{10}$, C_1 - C_6 alkyl, $-(CH_2)_t(C_6$ - C_{10} aryl), $-(CH_2)_t$ (5 to 10 membered heterocyclic), $-(CH_2)_tO(CH_2)_qOR^9$, and $-(CH_2)_tOR^9$, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, or R^{12} and R^{13} may be taken together with the nitrogen to which they are attached to form a C_5 - C_9 azabicyclic, aziridinyl, azetidiny, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring wherein said C_5 - C_9 azabicyclic, aziridinyl, azetidiny, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5 R^5 substituents, with the proviso R^{12} and R^{13} are not both bonded to the nitrogen directly through an oxygen.

30 3. The compound of claim 2, wherein R^{11} is $-C(O)NR^{12}R^{13}$, wherein each R^{12} and R^{13} is independently selected from H, C_1 - C_6 alkyl, $-(CH_2)_tOR^9$, wherein t is an integer from 0 to 6, and the alkyl moiety of the foregoing R^{12} and R^{13} groups is optionally substituted by 1 to 3

5 substituents independently selected from halo, cyano, trifluoromethyl, $-C(O)R^8$, $-NR^9C(O)R^{10}$, $-C(O)NR^9R^{10}$, $-NR^9R^{10}$, C_1-C_6 alkyl, $-(CH_2)_t(C_6-C_{10} \text{ aryl})$, $-(CH_2)_t(5 \text{ to } 10 \text{ membered heterocyclic})$, $-(CH_2)_tO(CH_2)_qOR^9$, and $-(CH_2)_tOR^9$, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, or R^{12} and R^{13} may be taken together with the nitrogen to which they are attached to form a C_5-C_9 azabicyclic, aziridinyl, azetidiny, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring wherein said C_5-C_9 azabicyclic, aziridinyl, azetidiny, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5 R^5 substituents, with the proviso R^{12} and R^{13} are not both bonded to the nitrogen directly through an oxygen.

4. The compound of claim 3, wherein R^{11} is $-C(O)NR^{12}R^{13}$, wherein each R^{12} and R^{13} is independently selected from H, C_1-C_6 alkyl, wherein t is an integer from 0 to 6, and the alkyl moiety of the foregoing R^{12} and R^{13} groups is optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, $-C(O)R^8$, $-NR^9C(O)R^{10}$, $-C(O)NR^9R^{10}$, $-NR^9R^{10}$, C_1-C_6 alkyl, $-(CH_2)_t(C_6-C_{10} \text{ aryl})$, $-(CH_2)_t(5 \text{ to } 10 \text{ membered heterocyclic})$, $-(CH_2)_tO(CH_2)_qOR^9$, and $-(CH_2)_tOR^9$, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, or R^{12} and R^{13} may be taken together with the nitrogen to which they are attached to form a C_5-C_9 azabicyclic, aziridinyl, azetidiny, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring wherein said C_5-C_9 azabicyclic, aziridinyl, azetidiny, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5 R^5 substituents, with the proviso R^{12} and R^{13} are not both bonded to the nitrogen directly through an oxygen.

5. The compound of claim 4, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form a C_5-C_9 azabicyclic, aziridinyl, azetidiny, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring wherein said C_5-C_9 azabicyclic, aziridinyl, azetidiny, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5 R^5 substituents.

6. The compound of claim 5, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form a C_5-C_9 azabicyclic, aziridinyl, azetidiny, or pyrrolidinyl ring wherein said C_5-C_9 azabicyclic, aziridinyl, azetidiny, or pyrrolidinyl ring are optionally substituted by 1 to 5 R^5 substituents.

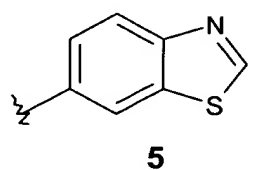
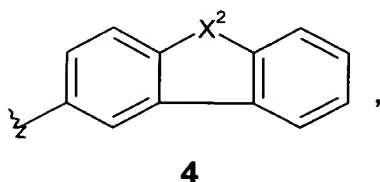
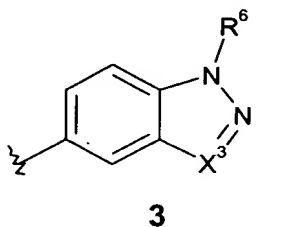
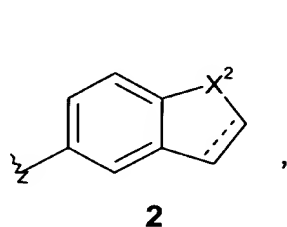
7. The compound of claim 6, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form a C_5-C_9 azabicyclic, azetidiny or pyrrolidinyl ring wherein said C_5-C_9 azabicyclic, azetidiny or pyrrolidinyl ring is optionally substituted by 1 to 5 R^5 substituents.

5 8. The compound of claim 7, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form a C_5-C_9 azabicyclic ring, wherein said C_5-C_9 azabicyclic ring is optionally substituted by 1 to 5 R^5 substituents.

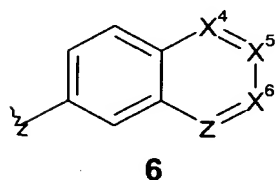
 9. The compound of claim 7, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached to form an azetidiny ring, wherein
10 said azetidiny ring is optionally substituted by 1 to 5 R^5 substituents.

 10. The compound of claim 7, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached to form a pyrrolidinyl ring, wherein said pyrrolidinyl ring is optionally substituted by 1 to 5 R^5 substituents.

 11. The compound of claim 1, wherein R^2 is a group of the formula



or



15 wherein X^2 is $-S-$, $-N(R^6)-$ or O , and X^3 , X^4 , X^5 , X^6 , and Z is N or CH , the dashed line in formula 2 represents an optional double bond, and the above R^2 groups of formulas 2, 4 and 6 are optionally substituted by 1 to 5 R^5 substituents and the R^2 groups of formulas 3 and 5 are optionally substituted by 1 to 3 R^5 substituents.

20 12. The compound of claim 11, wherein said R^2 group is a group of formula 2 or 6, wherein said formulas 2 and 6 are optionally substituted by 1 to 5 R^5 substituents.

 13. The compound of claim 1, wherein said compound is selected from the group consisting of:

5 7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carboxylic acid methyl-pyridin-3-ylmethyl-amide;

Azetidin-1-yl-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

[7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-pyrrolidin-1-yl-methanone;

7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carboxylic acid cyclohexyl-methyl-amide;

(2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carboxylic acid methyl-(2-morpholin-4-yl-ethyl)-amide;

15 N-{1-[7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-acetamide;

N-Ethyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-acetamide;

20 (3-Methylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

(3-Dimethylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

(6-Amino-3-aza-bicyclo[3.1.0]hex-3-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

25 (3-Dimethylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

(2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

30 (3-Hydroxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

(2-Hydroxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

(3-Methoxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

35 (3-Ethoxy-azetidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

N-Methyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-acetamide;

5 cyclobutanecarboxylic acid {1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-amide; pharmaceutically acceptable salts of said compounds; solvates of said compounds; and prodrugs of said compounds.

14. The compound of claim 13, wherein said compound is selected from the group consisting of

10 (2S)-(2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

(+/-)-N-Ethyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-acetamide;

15 (3S)-(3-Dimethylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

(+/-)-N-Methyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-acetamide;

(2R)-(2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

20 (3S)-(3-Hydroxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

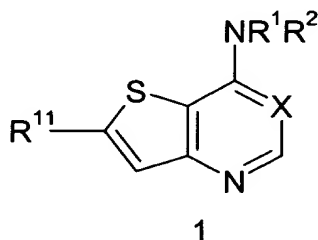
(3R)-(3-Hydroxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

25 (+/-)-Cyclobutanecarboxylic acid {1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-amide;

6-Amino-3-aza-bicyclo[3.1.0]hex-3-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

(3S)-(3-Methoxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone; pharmaceutically acceptable salts of said compounds; solvates of said
30 compounds; and prodrugs of said compounds.

15. A compound of the formula 1



or a pharmaceutically acceptable salt, prodrug or hydrate thereof,

X is N, CH or C(CN);

35 R¹ is H or C₁-C₆ alkyl;

5 R^2 is 5 to 13 membered heterocyclic, wherein said R^2 group is optionally substituted by 1 to 5 R^5 substituents,

each R^5 is independently selected from halo, cyano, trifluoromethoxy, trifluoromethyl, $-C(O)R^8$, $-NR^6C(O)R^7$, $-C(O)NR^6R^7$, $-NR^6R^7$, $-OR^9$, $-SO_2NR^6R^7$, $-SO_2R^6$, $-NR^6SO_2R^7$, $-NR^6SO_2NR^9R^{10}$, C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, $-(CH_2)_tO(CH_2)_qNR^6R^7$, $-(CH_2)_tO(CH_2)_qOR^9$, $-(CH_2)_tOR^9$, $-S(O)_j(C_1-C_6$ alkyl), $-(CH_2)_t(C_6-C_{10}$ aryl), $-(CH_2)_t(5$ to 10 membered heterocyclic), $-(CH_2)_tO(CH_2)_q(5$ to 10 membered heterocyclic), $-C(O)(CH_2)_t(5$ to 10 membered heterocyclic), $-(CH_2)_jNR^7(CH_2)_qNR^6R^7$, $-(CH_2)_jNR^7CH_2C(O)NR^6R^7$, $-(CH_2)_jNR^7(CH_2)_qNR^6C(O)R^8$, $-(CH_2)_jNR^7(CH_2)_tO(CH_2)_qOR^9$, $-(CH_2)_jNR^7(CH_2)_qS(O)_j(C_1-C_6$ alkyl), $-(CH_2)_jNR^7(CH_2)_tR^6$, $-SO_2(CH_2)_t(C_6-C_{10}$ aryl), and $-SO_2(CH_2)_t(5$ to 10 membered heterocyclic), wherein j is an integer from 0 to 2, t is an integer from 0 to 6, q is an integer from 2 to 6, the $-(CH_2)_q-$ and $-(CH_2)_t-$ moieties of the foregoing R^5 groups optionally include a carbon-carbon double or triple bond where t is an integer from 2 to 6, and the alkyl, aryl and heterocyclic moieties of the foregoing R^5 groups are optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, $-C(O)R^8$, $-NR^6C(O)R^7$, $-C(O)NR^6R^7$, $-(CH_2)_tNR^6R^7$, $-SO_2R^6$, $-SO_2NR^6R^7$, C_1-C_6 alkyl, $-(CH_2)_t(5$ to 10 membered heterocyclic), $-(CH_2)_tO(CH_2)_qOR^9$, and $-(CH_2)_tOR^9$, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6;

each R^6 and R^7 is independently selected from H, C_1-C_6 alkyl, $-(CH_2)_t(C_6-C_{10}$ aryl), $-(CH_2)_t(5$ to 10 membered heterocyclic), $-(CH_2)_tO(CH_2)_qOR^9$, and $-(CH_2)_tOR^9$, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, and the alkyl, aryl and heterocyclic moieties of the foregoing R^6 and R^7 groups are optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, $-C(O)R^8$, $-NR^9C(O)R^{10}$, $-C(O)NR^9R^{10}$, $-NR^9R^{10}$, C_1-C_6 alkyl, $-(CH_2)_t(C_6-C_{10}$ aryl), $-(CH_2)_t(5$ to 10 membered heterocyclic), $-(CH_2)_tO(CH_2)_qOR^9$, and $-(CH_2)_tOR^9$, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, with the proviso that where R^6 and R^7 are both attached to the same nitrogen, then R^6 and R^7 are not both bonded to the nitrogen directly through an oxygen;

each R^8 is independently selected from H, C_1-C_{10} alkyl, $-(CH_2)_t(C_6-C_{10}$ aryl), and $-(CH_2)_t(5$ to 10 membered heterocyclic), wherein t is an integer from 0 to 6;

each R^9 and R^{10} is independently selected from H and C_1-C_6 alkyl;

35 R^{11} is $-C(O)NR^{12}R^{13}$, $-(CH_2)_tNR^{12}R^{13}$, $-NR^{12}C(=O)R^{13}$, $-SO_2R^{12}$, $-SO_2NR^{12}R^{13}$, $-NR^9SO_2R^{12}$, $-NR^9SO_2NR^{12}R^{13}$, $-C(=N-OR^{12})R^{13}$, $-C(=NR^{12})R^{13}$, $-NR^9C(=NR^{12})R^{13}$, $-C(=NR^{12})NR^9R^{13}$, $-NR^9C(=NR^{12})NR^9R^{13}$, $-C(O)R^{12}$ and $-CO_2R^{12}$ and wherein each R^{12} and R^{13} is independently selected from H, C_1-C_6 alkyl, $-(CH_2)_t(C_3-C_{10}$ cycloalkyl), $-(CH_2)_t(C_6-C_{10}$ aryl), $-(CH_2)_t(5$ to 10 membered heterocyclic), $-(CH_2)_tO(CH_2)_qOR^9$, $-(CH_2)_tOR^9$, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, and the alkyl, aryl and heterocyclic moieties

5 of the foregoing R^{12} and R^{13} groups are optionally substituted by 1 to 3 substituents independently selected from R^5 or R^{12} and R^{13} taken together with the nitrogen to which they are attached to form a C_5 - C_9 azabicyclic, aziridinyl, azetidiny, pyrrolidinyl, piperidinyl, piperazinyl, morpholinyl, thiomorpholinyl, isoquinolinyl, or dihydroisoquinolinyl ring, wherein said C_5 - C_9 azabicyclic, aziridinyl, azetidiny, pyrrolidinyl, piperidinyl, piperazinyl, morpholinyl, 10 thiomorpholinyl, isoquinolinyl, or dihydroisoquinolinyl ring are optionally substituted by 1 to 5 R^5 substituents, with the proviso R^{12} and R^{13} are not both bonded to the nitrogen directly through an oxygen.

16. The compound of claim 15, wherein R^{11} is $-C(O)NR^{12}R^{13}$, $-SO_2R^{12}$, $-SO_2NR^{12}R^{13}$, $-C(=N-OR^{12})R^{13}$, and $-C(=NR^{12})R^{13}$ wherein each R^{12} and R^{13} is independently 15 selected from H, C_1 - C_6 alkyl, $-(CH_2)_tOR^9$, wherein t is an integer from 0 to 6, and the alkyl moiety of the foregoing R^{12} and R^{13} groups is optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, $-C(O)R^8$, $-NR^9C(O)R^{10}$, $-C(O)NR^9R^{10}$, $-NR^9R^{10}$, C_1 - C_6 alkyl, $-(CH_2)_l(C_6-C_{10}$ aryl), $-(CH_2)_l(5$ to 10 membered heterocyclic), $-(CH_2)_lO(CH_2)_qOR^9$, and $-(CH_2)_lOR^9$, wherein t is an integer from 0 to 6 and q is 20 an integer from 2 to 6, or R^{12} and R^{13} may be taken together with the nitrogen to which they are attached to form a C_5 - C_9 azabicyclic, aziridinyl, azetidiny, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring wherein said C_5 - C_9 azabicyclic, aziridinyl, azetidiny, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5 R^5 substituents, with the proviso R^{12} and R^{13} are not both bonded to the nitrogen directly through 25 an oxygen.

17. The compound of claim 16, wherein R^{11} is $-C(O)NR^{12}R^{13}$, wherein each R^{12} and R^{13} is independently selected from H, C_1 - C_6 alkyl, $-(CH_2)_tOR^9$, wherein t is an integer from 0 to 6, and the alkyl moiety of the foregoing R^{12} and R^{13} groups is optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, $-C(O)R^8$, 30 $-NR^9C(O)R^{10}$, $-C(O)NR^9R^{10}$, $-NR^9R^{10}$, C_1 - C_6 alkyl, $-(CH_2)_l(C_6-C_{10}$ aryl), $-(CH_2)_l(5$ to 10 membered heterocyclic), $-(CH_2)_lO(CH_2)_qOR^9$, and $-(CH_2)_lOR^9$, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, or R^{12} and R^{13} may be taken together with the nitrogen to which they are attached to form a C_5 - C_9 azabicyclic, aziridinyl, azetidiny, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring wherein said C_5 - C_9 azabicyclic, aziridinyl, 35 azetidiny, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5 R^5 substituents, with the proviso R^{12} and R^{13} are not both bonded to the nitrogen directly through an oxygen.

18. The compound of claim 17, wherein R^{11} is $-C(O)NR^{12}R^{13}$, wherein each R^{12} and R^{13} is independently selected from H, C_1 - C_6 alkyl, wherein t is an integer from 0 to 6, and 40 the alkyl moiety of the foregoing R^{12} and R^{13} groups is optionally substituted by 1 to 3

5 substituents independently selected from halo, cyano, trifluoromethyl, $-C(O)R^8$, $-NR^9C(O)R^{10}$, $-C(O)NR^9R^{10}$, $-NR^9R^{10}$, C_1-C_6 alkyl, $-(CH_2)_t(C_6-C_{10} \text{ aryl})$, $-(CH_2)_t(5 \text{ to } 10 \text{ membered heterocyclic})$, $-(CH_2)_tO(CH_2)_qOR^9$, and $-(CH_2)_tOR^9$, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, or R^{12} and R^{13} may be taken together with the nitrogen to which they are attached to form a C_5-C_9 azabicyclic, aziridiny, azetidiny, pyrrolidiny, piperidiny, piperaziny, or morpholiny ring wherein said C_5-C_9 azabicyclic, aziridiny, azetidiny, pyrrolidiny, piperidiny, piperaziny, or morpholiny ring are optionally substituted by 1 to 5 R^5 substituents, with the proviso R^{12} and R^{13} are not both bonded to the nitrogen directly through an oxygen.

15 19. The compound of claim 18, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form a C_5-C_9 azabicyclic, aziridiny, azetidiny, pyrrolidiny, piperidiny, piperaziny, or morpholiny ring wherein said C_5-C_9 azabicyclic, aziridiny, azetidiny, pyrrolidiny, piperidiny, piperaziny, or morpholiny ring are optionally substituted by 1 to 5 R^5 substituents.

20 20. The compound of claim 19, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form a C_5-C_9 azabicyclic, aziridiny, azetidiny, or pyrrolidiny ring, wherein said C_5-C_9 azabicyclic, aziridiny, azetidiny, or pyrrolidiny ring is optionally substituted by 1 to 5 R^5 substituents.

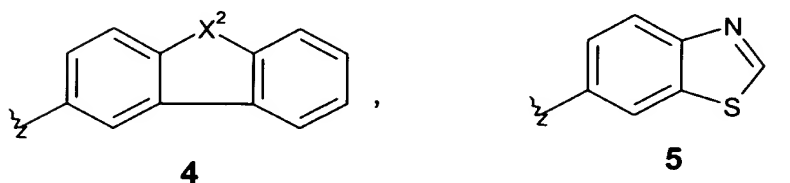
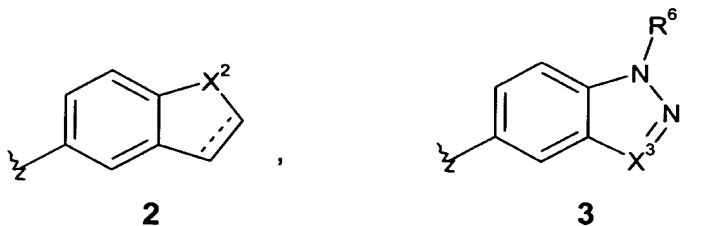
25 21. The compound of claim 20, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form a C_5-C_9 azabicyclic, azetidiny or pyrrolidiny ring, wherein said a C_5-C_9 azabicyclic, azetidiny or pyrrolidiny ring is optionally substituted by 1 to 5 R^5 substituents.

30 22. The compound of claim 21, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form a C_5-C_9 azabicyclic ring, wherein said C_5-C_9 azabicyclic ring is optionally substituted by 1 to 5 R^5 substituents.

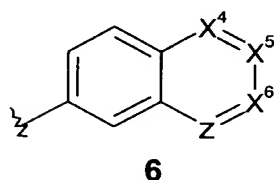
23. The compound of claim 21, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form an azetidiny ring, wherein said azetidiny ring is optionally substituted by 1 to 5 R^5 substituents.

35 24. The compound of claim 21, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form a pyrrolidiny ring, wherein said pyrrolidiny ring is optionally substituted by 1 to 5 R^5 substituents.

- 5 25. The compound of claim 21, wherein R^2 is a group of the formula



or



10 wherein X^2 is -S-, -N(R^6)- or O, and X^3 , X^4 , X^5 , X^6 , and Z is N or CH, the dashed line in formula 2 represents an optional double bond, and the above R^2 groups of formulas 2, 4 and 6 are optionally substituted by 1 to 5 R^5 substituents and the R^2 groups of formulas 3 and 5 are optionally substituted by 1 to 3 R^5 substituents.

26. The compound of claim 24, wherein said R^2 group is a group of formula 2 or 6, wherein said formulas 2 and 6 are optionally substituted by 1 to 5 R^5 substituents.

15 27. The compound of claim 15, wherein said compound is selected from the group consisting of:

7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carboxylic acid methyl-pyridin-3-ylmethyl-amide;

Azetidin-1-yl-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

[7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-pyrrolidin-1-yl-methanone;

20 7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carboxylic acid cyclohexyl-methyl-amide;

(2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

5 7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carboxylic acid methyl-(2-morpholin-4-yl-ethyl)-amide;

N-{1-[7-(2-Methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-acetamide;

10 N-Ethyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-acetamide;

(3-Methylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

(3-Dimethylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

15 (6-Amino-3-aza-bicyclo[3.1.0]hex-3-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

(3-Dimethylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

20 (2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

(3-Hydroxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

(2-Hydroxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

25 (3-Methoxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

(3-Ethoxy-azetidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

30 N-Methyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-acetamide;

cyclobutanecarboxylic acid {1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-amide; pharmaceutically acceptable salts of said compounds; solvates of said compounds; and prodrugs of said compounds.

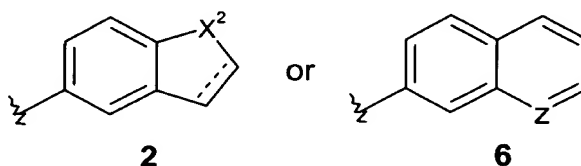
35 28. The compound of claim 27, wherein said compound is selected from the group consisting of

(2S)-(2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;

(+/-)-N-Ethyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-acetamide;

- 5 (3S)-(3-Dimethylamino-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
 (+/-)-N-Methyl-N-{1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-acetamide;
 (2R)-(2-Methoxymethyl-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
 10 (3S)-(3-Hydroxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
 (3R)-(3-Hydroxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
 15 (+/-)-Cyclobutanecarboxylic acid {1-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridine-2-carbonyl]-pyrrolidin-3-yl}-amide;
 6-Amino-3-aza-bicyclo[3.1.0]hex-3-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone;
 (3S)-(3-Methoxy-pyrrolidin-1-yl)-[7-(2-methyl-1H-indol-5-ylamino)-thieno[3,2-b]pyridin-2-yl]-methanone; pharmaceutically acceptable salts of said compounds; solvates of said compounds; and prodrugs of said compounds.

29. A compound of claim 1, wherein X is CH; Y is N; R¹ is H; R² is



25 X² is -N(R⁶)-, the dashed line in formula 2 represents an optional double bond, Z is CH or N and the above R² group of formulas 2 and 6 are optionally substituted by 1 to 5 R⁵.

30. The compound of claim 29, wherein R¹¹ is -C(O)NR¹²R¹³, -SO₂R¹², -SO₂NR¹²R¹³, -C(=N-OR¹²)R¹³, and -C(=NR¹²)R¹³ wherein each R¹² and R¹³ is independently selected from H, C₁-C₆ alkyl, -(CH₂)_tOR⁹, wherein t is an integer from 0 to 6, and the alkyl moiety of the foregoing R¹² and R¹³ groups is optionally substituted by 1 to 3 substituents
 30 independently selected from halo, cyano, trifluoromethyl, -C(O)R⁸, -NR⁹C(O)R¹⁰, -C(O)NR⁹R¹⁰, -NR⁹R¹⁰, C₁-C₆ alkyl, -(CH₂)_t(C₆-C₁₀ aryl), -(CH₂)_t(5 to 10 membered heterocyclic), -(CH₂)_tO(CH₂)_qOR⁹, and -(CH₂)_tOR⁹, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, or R¹² and R¹³ may be taken together with the nitrogen to which they are attached to form a C₅-C₉ azabicyclic, aziridiny, azetidiny, pyrrolidiny, piperidiny, piperaziny, or morpholiny ring wherein said C₅-C₉ azabicyclic, aziridiny, azetidiny, pyrrolidiny, piperidiny, piperaziny, or morpholiny ring are optionally substituted by 1 to 5 R⁵
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5 substituents, with the proviso R^{12} and R^{13} are not both bonded to the nitrogen directly through an oxygen.

31. The compound of claim 30, wherein R^{11} is $-C(O)NR^{12}R^{13}$, wherein each R^{12} and R^{13} is independently selected from H, C_1-C_6 alkyl, $-(CH_2)_tOR^9$, wherein t is an integer from 0 to 6, and the alkyl moiety of the foregoing R^{12} and R^{13} groups is optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, $-C(O)R^8$, $-NR^9C(O)R^{10}$, $-C(O)NR^9R^{10}$, $-NR^9R^{10}$, C_1-C_6 alkyl, $-(CH_2)_l(C_6-C_{10}$ aryl), $-(CH_2)_l(5$ to 10 membered heterocyclic), $-(CH_2)_lO(CH_2)_qOR^9$, and $-(CH_2)_lOR^9$, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, or R^{12} and R^{13} may be taken together with the nitrogen to which they are attached to form a C_5-C_9 azabicyclic, aziridiny, azetidiny, pyrrolidiny, piperidiny, piperaziny, or morpholiny ring wherein said C_5-C_9 azabicyclic, aziridiny, azetidiny, pyrrolidiny, piperidiny, piperaziny, or morpholiny ring are optionally substituted by 1 to 5 R^5 substituents, with the proviso R^{12} and R^{13} are not both bonded to the nitrogen directly through an oxygen.

32. The compound of claim 31, wherein R^{11} is $-C(O)NR^{12}R^{13}$, wherein each R^{12} and R^{13} is independently selected from H, C_1-C_6 alkyl, wherein t is an integer from 0 to 6, and the alkyl moiety of the foregoing R^{12} and R^{13} groups is optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, $-C(O)R^8$, $-NR^9C(O)R^{10}$, $-C(O)NR^9R^{10}$, $-NR^9R^{10}$, C_1-C_6 alkyl, $-(CH_2)_l(C_6-C_{10}$ aryl), $-(CH_2)_l(5$ to 10 membered heterocyclic), $-(CH_2)_lO(CH_2)_qOR^9$, and $-(CH_2)_lOR^9$, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, or R^{12} and R^{13} may be taken together with the nitrogen to which they are attached to form a C_5-C_9 azabicyclic, aziridiny, azetidiny, pyrrolidiny, piperidiny, piperaziny, or morpholiny ring wherein said C_5-C_9 azabicyclic, aziridiny, azetidiny, pyrrolidiny, piperidiny, piperaziny, or morpholiny ring are optionally substituted by 1 to 5 R^5 substituents, with the proviso R^{12} and R^{13} are not both bonded to the nitrogen directly through an oxygen.

33. The compound of claim 32, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form a C_5-C_9 azabicyclic, aziridiny, azetidiny, pyrrolidiny, piperidiny, piperaziny, or morpholiny ring wherein said C_5-C_9 azabicyclic, aziridiny, azetidiny, pyrrolidiny, piperidiny, piperaziny, or morpholiny ring are optionally substituted by 1 to 5 R^5 substituents.

34. The compound of claim 33, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form a C_5-C_9 azabicyclic, aziridiny, azetidiny, or pyrrolidiny ring wherein said C_5-C_9 azabicyclic, aziridiny, azetidiny, or pyrrolidiny ring is optionally substituted by 1 to 5 R^5 substituents.

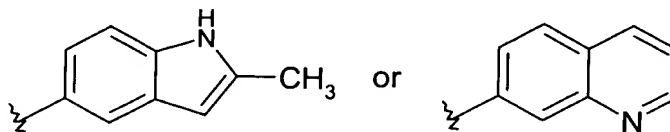
5 35. The compound of claim 34, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form a C_5-C_9 azabicyclic, azetidinyll or pyrrolidinyl ring wherein said C_5-C_9 azabicyclic, azetidinyll or pyrrolidinyl ring is optionally substituted by 1 to 5 R^5 substituents.

10 36. The compound of claim 35, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form a C_5-C_9 azabicyclic ring wherein said C_5-C_9 azabicyclic ring is optionally substituted by 1 to 5 R^5 substituents.

37. The compound of claim 36, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form an azetidinyll ring wherein said azetidinyll ring is optionally substituted by 1 to 5 R^5 substituents.

15 38. The compound of claim 37, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form a pyrrolidinyl ring wherein said pyrrolidinyl ring is optionally substituted by 1 to 5 R^5 substituents.

39. A compound of claim 1, wherein X is CH; Y is N; R^1 is H; R^2 is



20 40. The compound of claim 39, wherein R^{11} is $-C(O)NR^{12}R^{13}$, $-SO_2R^{12}$, $-SO_2NR^{12}R^{13}$, $-C(=N-OR^{12})R^{13}$, and $-C(=NR^{12})R^{13}$ wherein each R^{12} and R^{13} is independently selected from H, C_1-C_6 alkyl, $-(CH_2)_tOR^9$, wherein t is an integer from 0 to 6, and the alkyl moiety of the foregoing R^{12} and R^{13} groups is optionally substituted by 1 to 3 substituents
25 independently selected from halo, cyano, trifluoromethyl, $-C(O)R^8$, $-NR^9C(O)R^{10}$, $-C(O)NR^9R^{10}$, $-NR^9R^{10}$, C_1-C_6 alkyl, $-(CH_2)_t(C_6-C_{10}$ aryl), $-(CH_2)_t(5$ to 10 membered heterocyclic), $-(CH_2)_tO(CH_2)_qOR^9$, and $-(CH_2)_tOR^9$, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, or R^{12} and R^{13} may be taken together with the nitrogen to which they are attached to form a C_5-C_9 azabicyclic, aziridinyl, azetidinyll, pyrrolidinyl, piperidinyl,
30 piperazinyl, or morpholinyl ring wherein said C_5-C_9 azabicyclic, aziridinyl, azetidinyll, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5 R^5 substituents, with the proviso R^{12} and R^{13} are not both bonded to the nitrogen directly through an oxygen.

35 41. The compound of claim 40, wherein R^{11} is $-C(O)NR^{12}R^{13}$, wherein each R^{12} and R^{13} is independently selected from H, C_1-C_6 alkyl, $-(CH_2)_tOR^9$, wherein t is an integer from 0 to 6, and the alkyl moiety of the foregoing R^{12} and R^{13} groups is optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, $-C(O)R^8$,

- 5 -NR⁹C(O)R¹⁰, -C(O)NR⁹R¹⁰, -NR⁹R¹⁰, C₁-C₆ alkyl, -(CH₂)_t(C₆-C₁₀ aryl), -(CH₂)_t(5 to 10 membered heterocyclic), -(CH₂)_tO(CH₂)_qOR⁹, and -(CH₂)_tOR⁹, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, or R¹² and R¹³ may be taken together with the nitrogen to which they are attached to form a C₅-C₉ azabicyclic, aziridinyl, azetidiny, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring wherein said C₅-C₉ azabicyclic, aziridinyl, azetidiny, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5 R⁵ substituents, with the proviso R¹² and R¹³ are not both bonded to the nitrogen directly through an oxygen.

- 15 42. The compound of claim 41, wherein R¹¹ is -C(O)NR¹²R¹³, wherein each R¹² and R¹³ is independently selected from H, C₁-C₆ alkyl, wherein t is an integer from 0 to 6, and the alkyl moiety of the foregoing R¹² and R¹³ groups is optionally substituted by 1 to 3 substituents independently selected from halo, cyano, trifluoromethyl, -C(O)R⁸, -NR⁹C(O)R¹⁰, -C(O)NR⁹R¹⁰, -NR⁹R¹⁰, C₁-C₆ alkyl, -(CH₂)_t(C₆-C₁₀ aryl), -(CH₂)_t(5 to 10 membered heterocyclic), -(CH₂)_tO(CH₂)_qOR⁹, and -(CH₂)_tOR⁹, wherein t is an integer from 0 to 6 and q is an integer from 2 to 6, or R¹² and R¹³ may be taken together with the nitrogen to which they are attached to form a C₅-C₉ azabicyclic, aziridinyl, azetidiny, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring wherein said C₅-C₉ azabicyclic, aziridinyl, azetidiny, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5 R⁵ substituents, with the proviso R¹² and R¹³ are not both bonded to the nitrogen directly through an oxygen.

- 25 43. The compound of claim 42, wherein R¹¹ is -C(O)NR¹²R¹³ wherein R¹² and R¹³ taken together with the nitrogen to which they are attached to form a C₅-C₉ azabicyclic, aziridinyl, azetidiny, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring wherein said C₅-C₉ azabicyclic, aziridinyl, azetidiny, pyrrolidinyl, piperidinyl, piperazinyl, or morpholinyl ring are optionally substituted by 1 to 5 R⁵ substituents.

- 30 44. The compound of claim 43, wherein R¹¹ is -C(O)NR¹²R¹³ wherein R¹² and R¹³ taken together with the nitrogen to which they are attached form a C₅-C₉ azabicyclic, aziridinyl, azetidiny, or pyrrolidinyl ring wherein said C₅-C₉ azabicyclic, aziridinyl, azetidiny, and pyrrolidinyl ring are optionally substituted by 1 to 5 R⁵ substituents.

- 35 45. The compound of claim 44, wherein R¹¹ is -C(O)NR¹²R¹³ wherein R¹² and R¹³ taken together with the nitrogen to which they are attached form a C₅-C₉ azabicyclic, azetidiny or pyrrolidinyl ring wherein said C₅-C₉ azabicyclic, azetidiny or pyrrolidinyl ring are optionally substituted by 1 to 5 R⁵ substituents.

- 40 46. The compound of claim 45, wherein R¹¹ is -C(O)NR¹²R¹³ wherein R¹² and R¹³ taken together with the nitrogen to which they are attached form a C₅-C₉ azabicyclic ring, wherein said C₅-C₉ azabicyclic ring is optionally substituted by 1 to 5 R⁵ substituents.

5 47. The compound of claim 46, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form an azetidiny ring, wherein said azetidiny ring is optionally substituted by 1 to 5 R^5 substituents.

 48. The compound of claim 47, wherein R^{11} is $-C(O)NR^{12}R^{13}$ wherein R^{12} and R^{13} taken together with the nitrogen to which they are attached form a pyrrolidinyl ring, wherein
10 said pyrrolidinyl ring is optionally substituted by 1 to 5 R^5 substituents.

 49. A pharmaceutical composition for the treatment of a hyperproliferative disorder in a mammal which comprises a therapeutically effective amount of a compound of claim 1 and a pharmaceutically acceptable carrier.

 50. The pharmaceutical composition of claim 49, wherein said hyperproliferative
15 disorder is cancer.

 51. The pharmaceutical composition of claim 50, wherein said cancer is brain, lung, kidney, renal, ovarian, squamous cell, bladder, gastric, pancreatic, breast, head, neck, oesophageal, gynecological, prostate, colorectal or thyroid cancer.

 52. The pharmaceutical composition of claim 49, wherein said hyperproliferative
20 disorder is noncancerous.

 53. The pharmaceutical composition of claim 52, wherein said disorder is a benign hyperplasia of the skin or prostate.

 54. A pharmaceutical composition for the treatment of a hyperproliferative disorder in a mammal which comprises a therapeutically effective amount of a compound of claim 1 in
25 combination with an anti-tumor agent selected from the group consisting of mitotic inhibitors, alkylating agents, anti-metabolites, intercalating antibiotics, enzymes, topoisomerase inhibitors, biological response modifiers, anti-hormones, and anti-androgens, and a pharmaceutically acceptable carrier.

 55. A pharmaceutical composition for the treatment of pancreatitis or kidney
30 disease in a mammal which comprises a therapeutically effective amount of a compound of claim 1 and a pharmaceutically acceptable carrier.

 56. A pharmaceutical composition for the blastocyte implantation in a mammal which comprises a therapeutically effective amount of a compound of claim 1 and a pharmaceutically acceptable carrier.

35 57. A pharmaceutical composition for treating a disease related to vasculogenesis or angiogenesis in a mammal which comprises a therapeutically effective amount of a compound of claim 1 and a pharmaceutically acceptable carrier.

 58. The pharmaceutical composition of claim 57, wherein said disease is selected from the group consisting of tumor angiogenesis, chronic inflammatory disease such as
40 rheumatoid arthritis, atherosclerosis, skin diseases such as psoriasis, excema, and scleroderma,

5 diabetes, diabetic retinopathy, retinopathy of prematurity, age-related macular degeneration, hemangioma, glioma, melanoma, Kaposi's sarcoma and ovarian, breast, lung, pancreatic, prostate, colon and epidermoid cancer.

59. A method of treating a hyperproliferative disorder in a mammal which comprises administering to said mammal a therapeutically effective amount of a compound of claim 1.

10 60. The method of claim 59 wherein said hyperproliferative disorder is cancer.

61. The method of claim 60 wherein said cancer is brain, lung, squamous cell, renal, kidney, ovarian, bladder, gastric, pancreatic, breast, head, neck, oesophageal, prostate, colorectal, gynecological or thyroid cancer.

15 62. The method of claim 60 wherein said hyperproliferative disorder is noncancerous.

63. The method of claim 62 wherein said disorder is a benign hyperplasia of the skin or prostate.

20 64. A method for the treatment of a hyperproliferative disorder in a mammal which comprises administering to said mammal a therapeutically effective amount of a compound of claim 1 in combination with an anti-tumor agent selected from the group consisting of mitotic inhibitors, alkylating agents, anti-metabolites, intercalating antibiotics, growth factor inhibitors, cell cycle inhibitors, enzymes, topoisomerase inhibitors, biological response modifiers, anti-hormones, and anti-androgens.

25 65. A method of treating pancreatitis or kidney disease in a mammal which comprises administering to said mammal a therapeutically effective amount of a compound of claim 1.

66. A method of preventing blastocyte implantation in a mammal which comprises administering to said mammal a therapeutically effective amount of a compound of claim 1.

30 67. A method for treating a disease related to vasculogenesis or angiogenesis in a mammal which comprises administering to said mammal a therapeutically effective amount of a compound of claim 1.

35 68. The method of claim 67, wherein said disease is selected from the group consisting of tumor angiogenesis, chronic inflammatory disease such as rheumatoid arthritis, atherosclerosis, skin diseases such as psoriasis, excema, and scleroderma, diabetes, diabetic retinopathy, retinopathy of prematurity, age-related macular degeneration, hemangioma, glioma, melanoma, Kaposi's sarcoma and ovarian, breast, lung, pancreatic, prostate, colon and epidermoid cancer.